

MINNESOTT BEACH

LAND USE PLAN
for the
TOWN OF MINNESOTT BEACH
North Carolina

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COASTAL ZONE
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INITIAL DRAFT

TOWN OF MINNESOTT BEACH LAND DEVELOPMENT PLAN /

Prepared for the Town Board of
Commissioners and the Town Planning
Board with the Technical Assistance
of Coastal Consultants, Ltd.

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1.1 Method of Assemblage

The method of assembling the data and other information in this land use plan follows the format set out by the Coastal Resources Commission in their guidelines for developing land use plans. In accordance with this format, existing data and information from local, State and Federal documents, studies and reports were extracted and adapted to the use of Minnesott Beach. In addition the data and information was enhanced by independent research by the consultants to the project. The plan is also a culmination of numerous interviews with persons who have an interest in the Town.

The policies by the Town have gone through a very deliberate process. This process began with conclusions of the planners and the Planning Board from the data assembled and was enhanced by public participation, especially from the information obtained through the questionnaire. The information was then synthesized, worked and re-worked by the Planning Board in the formulation of possible policies, alternative policies and recommended policies for adoption by the Town Board. The Town Board then reviewed the recommendations and took appropriate action.

1.2 Executive Summary

The Town is in the process of making the transformation from a subdivision development and waterfront camp area to a comprehensive community - municipality. Such a transition is difficult, since municipality status has required the imposition of a Town government and the rules and regulations associated with it. Many landowners and residents who have previously used their land and lived in a relatively unrestricted setting now find it necessary to cope with new restrictions. Of course, such restrictions such as noise ordinances, zoning and subdivision regulations are intended to make the entire community a better place to live and work. Other benefits from pooled resources such as taxes enable the community to have better streets, a public water system, trash removal and other services.

The purpose of the Plan is to establish a set of policies which represent the present and future desires of the Town in terms of land use, growth, services and the environment. The Town wishes to grow at a moderate rate as a primarily residential community, with only those services and development characteristics to serve the needs of a residential community. The Town will protect its environment, and, realizing the necessity of dependence upon on-lot sewage disposal for some time to come, will regulate development location and density to prevent significant damage to surface and groundwater.

The Town will continue to provide services on an as needed/budget controlled basis. The Town will soon enact a zoning ordinance and subdivision regulations which will regulate densities and provide development standards.

EXISTING CONDITIONS

2.1 General Description

The Town of Minnesott Beach is located on the southern-most point of Pamlico County. The Town is located on the Neuse River and has in the past been a community oriented toward summer use, retirement homes, and lots purchased for future use or speculation. The Town, however, is becoming more of a year-round resident community. Current year-round population is about 140.

Minnesott Beach is served by Highway 306 which terminates in the Town. There is a State operated free ferry which crosses the Neuse River on a year-round basis.

The Town is mostly residential subdivision in design, with limited commercial serving only basic needs of the residents. A golf course and club is the major recreational facility, as well as access to the Neuse River.

The topography of the Town is somewhat uncharacteristic to the eastern Coastal Plain due to its location on a high sandy bank. There is also topographic relief throughout the Town especially along creeks which run through the Town to the Neuse.

2.2 A. Total Population and Change

This land use plan begins with the study of population. Population affects the land use plan in many ways. It is the level of population and its likely future levels that impose possible strains on the land's capacity to meet those demands. Population can be the most important criterion in deciding whether and when major capital intensive facilities are needed. The characteristics of the population will determine whether peculiar service needs exist or whether typical needs will not be experienced. The characteristics of the population also help us identify future

problems (and sometimes offer an explanation for seemingly unexplainable present land use conditions).

Minnesott Beach has both a permanent or year-round population and a seasonal population. A direct count of the seasonal population has never been taken; a count of the permanent population was made in the 1980 Census. Previous to 1980 information on population is limited due to the fact that the Town was not incorporated until 1973. Information on the Town is difficult to extrapolate from the 1970 Census because the Town was only a part of a much larger enumeration district.

The permanent population of Minnesott Beach was estimated by the North Carolina Department of Administration at 129 persons in 1979. The United States Bureau of the Census determined the 1980 population at 139 persons. Coastal Consultants, Ltd., the consultants to this plan, estimated the population of the Town as follows:

They determined that the present population is a function of the number of dwelling units currently being occupied throughout the majority of the year, times a factor allowing for the number of persons per house, less the number of persons (houses times a factor) living in seasonal dwellings. The number of occupied dwellings can be determined from the water sales in the Town. Accordingly the Town averaged approximately 120 water hook-ups during 1980. Of these approximately 10 were commercial and 2 were mobile homes parks which together accounted for approximately 60 mobile homes. Furthermore, 2 of the hookups were town-houses (each had 4 units, but 1 was considered as 1 unit).

Thus, the Town has the following housing profile:

TABLE 1

MINNESOTT BEACH HOUSING PROFILE, 1980

<u>Commercial</u>	<u>Single Family</u>	<u>Townhouse</u>	<u>Mobile Units</u>	<u>Summer Houses Cottages</u>
10	106	8	60	24

Having studied the information on water use, etc., we anticipate an average house size of about 2.3 persons. The consultants' experience with seasonal communities suggests that the seasonal population may reach as high as 3.5 persons per unit. This allows for a mixture of units that are and are not seasonally used.

The following scenarios project population under differing assumptions.

TABLE 2

1980 POPULATION SCENARIOS: PERMANENT

<u>Number of Occupied Units</u>	<u>Assumption about Persons/Unit</u>	<u>Estimated Population</u>
139	2.2	306
	2.5	348
	2.8	389

TABLE 3

1980 POPULATION SCENARIOS: SEASONAL

<u>Number of Occupied Units</u>	<u>Assumption about Persons/Unit</u>	<u>Estimated Population</u>
174	3.3	574
	3.5	609
	3.9	678

A review of the actual water sales by the Town reflects another view of the population, this time as a function of time.

TABLE 4
WATER SALES PER MONTH, 1980¹

<u>Period</u>	<u>Gallons Sold</u>	<u>Populations under differing assumptions</u>		
		<u>55 g/p</u>	<u>65 g/p</u>	<u>75 g/p</u>
Summer 1980	1,087,900	660	558	484
Summer 1979	877,470	532	500	390
Spring/Fall 1980	481,150	292	247	214
Spring/Fall 1979	453,850	275	233	202

From studies done on other water data in beach and seasonal communities, the consultants suggest that values in the range of 55 to 65 gallons per day per person are possible. Minnesott Beach has no industrial or heavy commercial water users that would have to be accounted for in an estimate of population in this manner.

In addition to the impact of persons living within the Town limits, some consideration of impact must also be given to a few other sources, including the number of persons (mostly teenagers) who live at any one time in the YMCA camp just beyond the Town limits, and persons who use the ferry service that docks near the Town.

A profile of the Town's permanent and seasonal population in terms of race, age, sex, income and occupation is possible through the random sample questionnaire mailed to property owners as part of the land use planning process. The questionnaire had a heavy response and reflects a confidence level well above 85%. Since the Town's services and facilities need to be planned for both permanent and seasonal populations, this source seems preferable to the census data for the enumeration district that includes Minnesott Beach.

¹ Town of Minnesott Beach, 1980.

B. VALUES AND ATTITUDES OF PROPERTY OWNERS IN MINNESOTT BEACH AS ARRIVED AT THROUGH AN ANALYSIS OF THE QUESTIONNAIRE DISTRIBUTED TO THEM DURING THE LAND USE PLANNING PROCESS.

During the 1981 land use planning process, the consultants to the Town distributed to a random sample of property owners a questionnaire designed to elicit local views and attitudes. The mailout was intended to produce a confidence rate of 85% on the responses. That rate was greatly exceeded.

The major conclusions from the questionnaire are as follows:

- (1) a significant issue in the Town is waterfront redevelopment; the waterfront is recognized as a blighted area which should be reclaimed by government and converted for park and recreation uses, especially beach and boat access.
- (2) property owners have a strong pro-growth attitude, providing the growth is residential single-family (maybe multi-family), and commercial; and providing it is shaped and controlled by zoning and other local ordinances.
- (3) the property owners may have some reservations about the benefits from tourism.
- (4) property owners are dissatisfied with many local services, especially fire, police, emergency, ambulance and health services; also, they are concerned about handling wastes with septic systems.
- (5) the property owners desire to protect all environmental features and do so through local regulations.
- (6) property owners are willing to pay a reasonable amount for improved facilities and services.

There do not appear to be any readily discernible sub-groups with values and attitudes different from the principal group.

In terms of specifics, the following data is available:

TABLE 5
LEVEL OF SATISFACTION WITH
SERVICES AND FACILITIES

<u>Service or Facility</u>	<u>Percentage of Low Scores</u> ¹	<u>Average Score</u> ²
Public water or wells	10.5	4.07
Public sewer or septic system	31.0	3.41
Local streets	21.0	3.26
Thoroughfares	10.8	3.38
Surface Drainage	11.8	3.79
Refuse Collection	6.4	4.45
Recreation	28.1	3.12
Town Hall	14.3	3.49
Fire	40.0	2.94
Police	54.3	2.40
Emergency Preparedness	41.9	2.68
Ambulance	38.2	2.64

¹ Respondents to questionnaire were asked to rate all the above services and facilities with a score of 1 to 5, with 5 being fully satisfied. Low scores consist of the percentage of times that a score of 1 or 2 was recorded.

² Average score is the average of all numbers selected. The average score for all responses was 3.30.

Comment:

Although the average score for all responses is higher than the average ideal score on the questionnaire, the high percentage of low scores marks several facilities and services for significant dissatisfaction.

TABLE 6
ATTITUDE TOWARDS GROWTH

<u>Attitude</u>	<u>Percentage of Respondents Holding Attitude</u>
Decrease growth rate	21.4%
Keep 70s growth rate	11.9
Increase slightly 70s rate	28.6
Increase substantially	38.1

Comment:

This is a strong pro-growth attitude. The growth rate in the 1970s was already extremely high. In terms of growth, the respondents would approve without restriction single family dwellings. They would prohibit and eliminate mobile homes, trailers, low income housing and heavy industry. They have more ambivalent attitudes towards other types of growth and appear to rely on policy making and local ordinances to control the growth and make it acceptable.

52.6% of the respondents desire a public sewer system, probably a necessity for light industry or commercial development, perhaps even for multi-family development.

TABLE 7

ATTITUDES TOWARDS ENVIRONMENTAL PROTECTION

Feature Under Consideration For Protection	Percentage of Respondents Desiring to Protect Feature by Local Regulation
Aquifer recharge areas	70.6%
Wooded areas	73.5
Steep slopes	75.8
Scenic areas	78.8
Wetlands and other AECs ³	43.6

³These areas were already identified as being under state and/or federal protection; respondents were asked if they desired local protection as well.

Comment:

These are rather high percentages in favor of local protection. 36.8% were willing to purchase land to protect it from development. 67% of the respondents desire to have over 20% of the total land in the Town in open space when the Town is fully developed. These goals can probably be accomplished through zoning and subdivision control, and the purchase of land for recreation and beach access.

Minnesott Beach is predominantly white with a heavy proportion of persons in the 55 and over age group. Males outnumber females, comprising 53% of the total population. The average family size is 2.28, 23 of 25 men who would qualify for the work force (and who were not retired) worked 50 weeks during the past year (1980). The Town is very heavily represented by the professions (medical, engineers, teachers) and by other respectable white-collar jobs (brokers, purchasers, administrators, secretaries, self-employed businessmen.) However, by far the largest single occupation-related classification is retired. A large percentage of the women who were not retired were employed full-time (34.6%). Furthermore, the average income for families exceeds \$40,000 per year (75% of those reporting); of individuals exceeds \$20,000; of males exceeds \$30,000. However, 31% of all families are retirement families; their incomes were not reported and are not computed in this average.

In keeping with the professional, high income nature of the community, we find that the Town is well-educated, with over 20% of the adult population having undertaken studies after college, and 83% having attended college. Furthermore, the Town is very definitely a new, rapidly growing community. 67% of the respondents who live in the Town either seasonally or permanently have moved to the Town within the last five years. Almost all the property owners who were not residing in the Town indicated that they intended to move to Town in the immediate future.

Some tables on age and income are presented below:

TABLE 8
AGE CHARACTERISTICS, 1980²

<u>Age Group</u>	<u>Percentage of Population in Group</u>
0-5	00
6-15	13
16-25	4
26-35	7
36-45	14
46-55	18
56-65	29
65-	16

(Numbers exceed 100% due to rounding)

TABLE 9
AVERAGE ANNUAL INCOME FOR INDIVIDUALS (1980)³

<u>Income Range</u>	<u>Percentage of all individuals employed full-time in range</u>
0-\$10,000	28% (84% female)
\$10,000-\$20,000	12% (67% female)
\$20,000-\$30,000	24% (all males)
\$30,000-above	36% (all males)

In conclusion, Minnesott Beach has decided to accept the following population estimates for planning purposes:

Permanent population (1980) 306
Seasonal population (1980) 609

The Town projects that the annual growth rate for the 1980s will average 24% per year for seasonal and 6% for permanent population. The population should continue to exhibit the same age, race, sex, economic, social profile as it has in the past. In terms of implications on planning, this type population should result in a high residential tax base. Because of the background of the population the Town should expect a high demand on services, especially public sewer and planning. The high average of

²Coastal Consultants, Ltd., responses to questionnaire 1981

³Ibid

the population may increase the need for adequate health services, ambulance and rescue squad operations. At the same time the Town may have increasing difficulties in staffing volunteer functions, such as fire protection and rescue squad operations, which require special physical demands. The large number of persons who inhabit the Town for only a portion of the year places a demand on police protection to guard personal property during absences. The retirement and sport accent of the Town will place increasing demands for beach access and recreational facilities. Although the income of a large portion of the Town will readily support a high level of services, a significant portion of the population can be expected to resist public expenditures for fear of varying demands that may overextend their abilities to live on a fixed income. In all, the Town can expect a high level of government participation from an intelligent, well-informed citizenry.

2.3 Economy

Despite the fact that Minnesott Beach is a seasonal community on the Neuse River, the economy of the Town is not geared for tourism. However, the Town has within its limits a country club, golf course, motel and restaurant. It also has a marina and other boating facilities.

As was noted in the previous section, the employment of the Town is heavily professional and white collar. 50% of the workers travel less than 10 miles to work, although 17% travel over 20 miles. Employment opportunities are thus heavily local, or in the nearby cities of New Bern, Havelock and Morehead City. The economic well-being of the community requires that the ferry crossing over the Neuse be maintained and continued. (In addition to employment uses, the Town relies on the use to reach markets.)

At present the Town has little economic activity, however, it has a market demand for considerable activity. A substantial number of tourists pass by the Town en route to the ferry; summer populations in Town are high and the YMCA camp adjacent to the Town incurs heavy use during the summer months. Similarly situated communities have experienced motels and restaurants built for meeting the demands of these persons. A recreational facility with access for tourists would help promote this development. Currently the Town has a restaurant with a regional reputation and a marina being constructed.

The market also exists for small commercial development, such as groceries, gas stations, banks, etc.

2.4 Agriculture, Fishing, Forestry, Seasonal Use.

Seasonal Use

See information on population in section 1.1

Agriculture

Agriculture is not a significant or important use in the Town.

Forestry

Although a portion of the Town is in wooded condition, this use is not deemed important to the Town. Forestry would probably be considered an inappropriate use in the Town.

Fishing

There are no commercial fisheries at this time within the Town limits. Some persons still engage in sport fishing, although the numbers appear to be declining.

2.5 Seasonal Use: Tourism

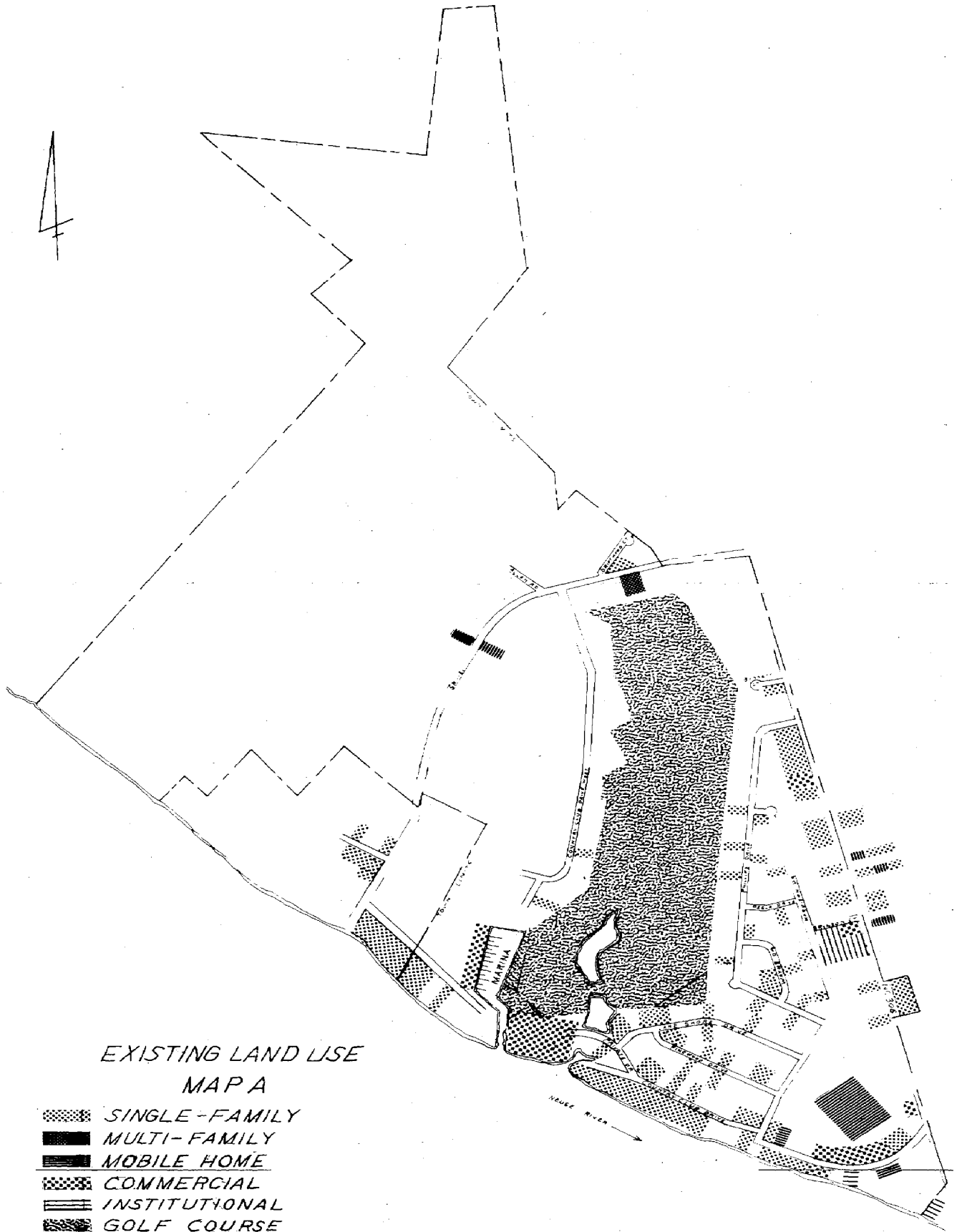
See section 2.1.

3.1 Existing Land Use






The Town is comprised of about 980 acres. The majority of the land is undeveloped, although about one-half of the total area of the Town is taken up by two major uses, the Minnesott Beach Golf and Country Club and residentially plotted lots.

The following are land uses and approximate acreages.

Residential	65.23 acres
Commercial Retail	2.30 acres
Commercial Recreation	203.37 acres
Governmental	2.33 acres
Plotted Vacant	95.93 acres
Open	610.84 acres



EXISTING LAND USE
MAP A

-  SINGLE-FAMILY
-  MULTI-FAMILY
-  MOBILE HOME
-  COMMERCIAL
-  INSTITUTIONAL
-  GOLF COURSE
-  VACANT

TOWN OF MINNESOTT BEACH

PAMLICO COUNTY, NORTH CAROLINA

The Town is a right triangle in shape with its base along the Neuse river. Most development has taken place within the eastern end of the triangle. The golf course occupies the center of the triangle, and the new marina development is on the western side of the golf course (see Map A).

Generally the land uses are well separated with the exception of the town water works and new town hall site, which are located on NC 306.

3.2 Land Use Compatibility Problems

Few significant land use compatibility problems exist in the Town. The commercial and seasonal use cottages and mobile homes are located on or near the Neuse River, well separated from the year-round residences which are located west of the above mentioned area on the Neuse River, and to the north between NC 306 and Phillips Drive.

The State Ferry dock is at the eastern-most tip of the Town and away from residential development. Few complaints are heard concerning the ferry, with the exception of some concern from the large wake made by the ferry which causes concern for shoreline owners.

The golf course is buffered from most residences by trees and presents pleasant and landscaped background to those residences nearby.

The marina is well buffered from any residence by forest growth.

The location of the Town water works presents an aesthetic compatibility problem, but this is not considered to be a problem by most residents.

Camp Seagull, a large YMCA recreational facility, is located adjacent to the Town along NC 306. Most residents do not believe the camp to pose any problems to the Town.

3.3 Problems from Unplanned Development

Because the Town had no local government during its early stages, the Town developed in a piecemeal way with little attention to street layout, building standards or public services. As a result, some difficulties have arisen. The golf course has physically split the Town in half. Since SR 1130 ends at the country club, there is no access to the western part of town, unless one drives back to NC 306 and accesses the western part of town by going down SR 1121 (Bennett Road). This has made the provision of fire, police and water service more difficult.

Because no local standards were in effect when many local streets were put in by developers, some of the streets do not meet standards and must eventually be brought up to par at public expense, some streets as yet remain unpaved.

Older cottages along the River front and the mobile home parks lack aesthetic appeal. Again, no local standards were in effect at the time of construction.

Many residences have been built in areas where the soils are less favorable for septic tanks than other soils available for development. Without a zoning ordinance, the Town has not been able to specify which areas should develop at what densities. Although the above mentioned problems may have resulted from unplanned development, they are of relatively small magnitude and are not considered to be serious problems.

3.4 Areas Experiencing or Likely To Experience Predominant Changes in Land Use.

Residential development occurs at a slow rate in the Town. The area most likely to be developed into residential lots is an area as yet unplotted in the northwestern part of Town. Other lots which have already been plotted will fill in at a slow rate of growth.

The most significant land use change is the development of a marina on the west side of the golf course. This development is proceeding rapidly, and when completed will comprise about 30 acres. Potential exists for Townhouse development near the marina.

3.5 Areas of Environmental Concern (AECs)

The Town of Minnesott Beach has the following areas of environmental concern: Coastal Wetlands - costal wetlands are found for about 150 feet along Alligator Gut from the Neuse River. The marsh areas quickly give way to steep banks, and the marsh areas are very limited. Estuarine Waters - estuarine waters are those of the Neuse River and Alligator Gut for a distance of about 500 feet. Public Trust Areas - the public trust areas are those of the marina creek beyond the estuarine waters.

Estuarine Shoreline - the estuarine shoreline is the shoreline of the Neuse River and Alligator Gut for a distance of about 150 feet (see Part II, section 2 for a more complete description of these fragile areas. (Also see map E).

4.1 Current Plans, Policies and Regulations

A. Summary of Existing Plans and Policies

Although the Town has a continuing interest in planning, no formal land use plan had been undertaken up to this time. The Town has been involved in the planning process with Pamlico County and with the assistance

of the Pamlico County Planning Department has developed the following goals and objectives:⁴

Goal: Develop adequate employment opportunities and prevent further out-migration of young adults from the Town.

Objectives: Develop tourist industry in the Town and surrounding area through related development and promotional activities.

- To increase year-round recreational opportunities through further development of the country club, parks, and development of a marina.
- Promote the construction of a bridge spanning the Neuse River from Minnesott Beach to allow better access to the Town as well as areas such as Cherry Point which provide potential employment opportunities.

Goal: Protect shellfish and other marine habitat from man-made pollution.

Objectives: Encourage a municipal sewer system.

- Discourage any industrial or other types of development not complimentary to the environment.

Goal: Protect the Town from future mixing of incompatible land uses.

Objectives: Encourage development based on a development plan.

- Utilize appropriate regulations to insure such development.

B. Listing of Existing Ordinances and Regulation

The Town presently has no zoning and subdivision regulation, although drafts of both ordinances have been prepared and are anticipated to be

⁴ Pamlico County Planning Department, Pamlico County Coastal Area Management Plan, 1976.

adopted soon.

(1) Zoning Proposed

The zoning ordinance is made up of six districts as follows:

R-20 Residential

The purpose of this district is to provide a minimum lot size of 20,000 square feet and permit agricultural and horticultural uses, provided that no buildings or structures used for the commercial growing or storage of agricultural or horticultural machinery or for the housing of farm animals or equipment shall be located nearer than 300 feet to a lot or building used or to be used for dwelling purposes and provided that no retail or wholesale business sales office is operated on the premises. Single family and two family dwellings are permitted.

R-M Multi-Family District

The purpose of this district is to allow for single family, two-family and multi-family dwellings. A minimum lot size of 8,500 square feet is required plus 2,000 additional square feet per dwelling unit for a lot with more than one dwelling unit.

C-1 Commercial

The purpose of this district is to provide orderly development and growth of activities that are normally associated with downtown shopping and service facilities. Dwelling units are not permitted in this district.

C-2 Commercial

The purpose of this district is to provide for encouragement, and protect the orderly growth and development of commercial activity and facilities related to the motoring public and highway development. No dwelling units are permitted in this district.

C-M Commercial Marina

The purpose of this district is to promote the marina character

of waterfront areas. Only those uses that will support and complement the marina atmosphere are allowed in this district. No dwelling units are permitted in this district.

Group Projects

In the case where two or more buildings are to be constructed on a plot of land at least two acres in size, not subdivided into customary streets and lots, and which will not be subdivided, the application of the terms of the zoning ordinance may be varied by the Planning Board in a manner that will be in harmony with the character of the neighborhood provided that the uses are limited to those permitted in the zoning district of the proposed project, that the overall intensity of land use is no higher and the standard of open space lower than that permitted in the district of the proposed project. Cluster subdivision meeting open space standards but with lots which fail to meet standards established for its zoning district may be approved on recommendation of the Planning Board after a public hearing and/or finding that the subdivision is in conformance with the subdivision regulations.

The appointed zoning administrator enforces the zoning ordinance and his decisions may be appealed to the Town Board of Appeals.

(2) Building Permits

A building permit is required before erecting, moving, enlarging or altering any building, sign, or structure.

The Town has adopted the North Carolina State Building, Plumbing and Electrical Codes, and a Certificate of Occupancy is required.

(3) Subdivision Regulations

The proposed subdivision regulations follow the definition of the North Carolina General Statute 160 A-376 for subdivision definitions.

All proposed subdivision plots must be submitted to the Planning

Board for recommendations. The final plot approved by the Planning Board must be submitted to the Town Board for approval.

All subdivisions are subject to design standards and required improvements are monuments, streets and alleys, drainage, fire hydrants, and water lines; and open space or fee in lieu of in the case of cluster developments.

Cluster or group developments have design requirements which allow for reduced lot areas by not more than 50% as well as the requirement of public dedication of open space.

4.3 State and Federal Licenses and Permits

STATE LICENSES AND PERMITS

Agency	Licenses and Permits
Department of Natural Resources and Community Development Division of Environmental Management	<ul style="list-style-type: none"> - Permits to discharge to surface waters or operate waste water treatment plants or oil discharge permits; <u>NPDES</u> Permits, (G.S. 143-215) - Permits for septic tanks with a capacity over 3000 gallons/day (G.S. 143-215.3). - Permits for withdrawal of surface or ground waters in capacity use areas (G.S. 143-215.15). - Permits for air pollution abatement facilities and sources (G.S. 143-215.108). - Permits for construction of complex sources; e.g. parking lots, subdivisions, stadiums, etc. (G.S. 143-215.109).

Department of Natural Resources and
Community Development
Office of Coastal Management

- Permits for construction of a well over 100,000 gallons/day (G.S. 87-88).
 - Permits to dredge and/or fill in estuarine waters, tide-lands, etc. (G.S. 113-229).
 - Permits to undertake development in Areas of Environmental Concern (G.S. 113A-118).
- NOTE: Minor development permits are issued by the local government.

Department of Natural Resources and
Community Development
Division of Land Resources

- Permits to alter or construct a dam (G.S. 143-215.66).
- Permits to mine (G.S. 74-51).
- Permits to drill an exploratory oil or gas well (G.S. 113-381).
- Permits to conduct geophysical exploration (G.S. 113-391).
- Sedimentation erosion control plans for any land disturbing activity of over one contiguous acre (G.S. 113A-54).
- Permits to construct an oil refinery.

Department of Natural Resources and
Community Development
Secretary of NRCD

Department of Administration

- Easements to fill where lands are proposed to be raised above the normal high water mark of navigable waters by filling (G.S. 146.6(c)).

Department of Human Resources

- Approval to operate a solid waste disposal site or facility (G.S. 130-166.16).

- Approval for construction of any public water supply facility that furnishes water to 15 or more year-round residences (G.S. 130-160.1). or 25 or more year-round residents.

FEDERAL LICENSES AND PERMITS

Agency	Licenses and Permits
Army Corps of Engineers (Department of Defense)	<ul style="list-style-type: none"> - Permits required under Section 9 and 10 of the Rivers and Harbors of 1899; permits to construct in navigable waters. - Permits required under Section 103 of the Marine Protection, Research and Sanctuaries Act of 1972. - Permits required under Section 404 of the Federal Water Pollution Control Act of 1972; permits to undertake dredging and/or filling activities.
Coast Guard (Department of Transportation)	<ul style="list-style-type: none"> - Permits for bridges, causeways, pipelines over navigable waters; required under the General Bridge Act of 1946 and the Rivers and Harbors Act of 1899. - Deep water port permits.
Geological Survey Bureau of Land Management (Department of Interior)	<ul style="list-style-type: none"> - Permits required for off-shore drilling. - Approvals of OCS pipeline corridor rights-of-way.
Nuclear Regulatory Commission	<ul style="list-style-type: none"> - Licenses for siting, construction and operation of nuclear power plants; required under the Atomic Energy Act of 1954 and Title II of the Energy Reorganization Act of 1974.
Federal Energy Regulatory Commission	<ul style="list-style-type: none"> - Permits for construction, operation and maintenance of interstate pipelines facilities required under the Natural Gas Act of 1938.

- Orders of interconnection of electric transmission facilities under Section 202(b) of the Federal Power Act.
- Permission required for abandonment of natural gas pipeline and associated facilities under Section 7C (b) of the Natural Gas Act of 1938.
- Licences for non-federal hydroelectric projects and associated transmission lines under Sections 4 and 15 of the Federal Power Act.⁵

⁵ Lists Provided by the North Carolina DNRCD.

PART II

CONSTRAINTS TO DEVELOPMENT

5.1 Land Suitability - Physical Limitations for Development

An analysis was made to determine the suitability for development of all undeveloped lands in the Town. The first part of the analysis deals with the general soil conditions in the Town and how the natural soil properties present certain restrictions to development. Soil scientists observe how soils behave when used as a growing place for native and cultivated plants, and as a material for structures, foundations for structures, or covering for structures, as well as the properties which relate to the functioning of filter beds for septic tanks. For example, they observe that filter beds for on-site disposal of sewage fail on a given kind of soil, and they relate this to the slow permeability of the soil or to its high water table. They see that streets, road pavements, and foundations for houses are cracked on a named kind of soil and they relate this failure to the high shrink-swell potential of the soil material. Thus, they use observation and knowledge of soil properties, together with available research data, to predict limitations or suitability of soils for present and future uses.

The second part of the analysis deals with hazard areas, including man-made hazards (for example airports, storage of hazardous chemicals) and natural hazards (for example erodible areas, flood hazard areas).

The third part of the analysis deals with sources of water supply including groundwater recharge areas (bedrocks and surficial and well-fields).

The fourth part of the analysis deals with fragile areas. These are areas which could easily be damaged or destroyed by inappropriate or poorly planned development (e.g. estuarine shoreline and waters, habitats, archaeologic and historic sites, wetlands).

The fifth part of the analysis includes areas with resource potential (e.g. publicly owned forests, parks, fish and game lands, wildlife sanctuaries, valuable mineral sites).

A. Soils

This is an analysis of the general suitability of the Town's soils for use as future sites for development. All of the Town's soils are classified as having some degree of physical limitations for development. The analysis indicates the various soils found in the Town and indicates the degree of suitability for various purposes. The results of the analysis are beneficial for planning purposes, however, on-site inspections would be necessary to determine specific soil properties for development. Although soils may be rated as having various degrees of limitations, engineering practices and construction techniques can alter the degree to which a particular limitation affects a development use.

Each rating for soil types as determined by the U.S. Soil Conservation Service is indicated below.

Slight: Soil properties are generally favorable for the stated use, or limitations are minor and can be easily overcome.

Moderate: Some soil properties are unfavorable, but limitations resulting from the properties can be overcome or modified by special planning, good design, and careful management.

Severe: Soil properties are unfavorable and resulting limitations are too difficult to correct or overcome. Soil will require major soil

reclamation or special design for stated uses. This rating does not imply that the soil cannot be used.

Very Severe: This rating is a subdivision of the severe rating and has one or more features so unfavorable for the stated use that the limitation is very difficult and expensive to overcome. Reclamation would be very difficult, requiring the soil material to be removed, replaced, or completely modified. This rating is confined to soils that require extreme modification and alteration, and are generally not used for dwellings and septic tank filter fields.⁶

⁶ Soil Conservation Service, U.S.A.

Use Rating⁷

Soil Unit	Map Symbol	Septic Tank Filter Fields	Dwellings without Basements	Dwellings with Basements	Local Streets and Roads	Playgrounds
Alpien	78B	Severe - Poor Filter	Slight	Slight	Slight	Severe Sandy
Baymeade	738	Moderate Wetness	Slight	Moderate Wetness	Slight	Severe Sandy
Conetoe	371	Slight	Slight	Slight	Slight	Moderate
Johnston	JB	Severe, Flooding and Wetness	Severe, Flooding and Wetness	Severe, Flooding Wetness	Severe, Flooding Wetness	Severe, Flooding Wetness
Kenansville	37	Slight	Slight	Slight	Slight	Severe- Sandy
Leon	582	Severe - Wetness	Severe Wetness	Severe Wetness	Severe - Wetness	Severe - Wetness
Rutlege	87	Severe - Wetness Poor Filtering	Severe - Wet	Severe - Wet	Severe - Wet	Severe - Wet

⁷ Soil Conservation Service, USDA



Analysis of the soil map and existing land use shows that most development in the Town has taken place on the Alpin soils, symbol 78B (see Map C). Although these high sandy soils present few hazards for structures such as dwellings and roads, the problem lies in their poor filtering capacity for septic tank filter fields. The proximity of the Town to the Neuse River would suggest that leachate from septic tanks could be introducing fecal coliform to the Neuse River. Present densities are still low, however, but continued development could present future problems without a public sewer system.

The soils for the first mile from the Neuse River north along NC 306 and adjacent to the road for a distance of about 500 feet are Kenansville soils, symbol 37. These are the Town's best soils as they offer few problems to development, including septic tank filter fields. Other good soils are also found in the Town (e.g. Conetoe, symbol 371; and Baymede, symbol 738).

B. Slope

Generally the topography of the area is relatively flat with slopes ranging from 1 to 5 percent. The areas of steep embankments are those which border the Neuse River, and those which border the marina creek. These slopes present significant hazards for development.

C. Hazard Areas

In the Town of Minnesott Beach, no significant man-made hazards exist with the possible exception of the ferry boat, which some residents claim causes excessive wake damage to shoreline and exists as a potential water polluter and explosion risk, and the Town water tower which could cause damage by bursting or falling.

The natural hazard which could occur is from flooding of the Neuse River. However, the Town is high enough above the River to be

out of the 100 year floodplain. Erosion of the River shoreline and beach is a constant problem.

D. Sources of Water Supply

The area is underlaid by about 3,500 feet of sediment ranging in age from Cretaceous to recent. These sediments that are of Eocene age are those which produce the less mineralized water.

The Castle Haynes limestone is a highly productive artesian aquifer in the area and principal source of water supply for public systems such as Minnesott Beach. This aquifer ranges from 200 to 400 feet in thickness and is composed of indurated shell limestone, domestic shell limestones, and beds of calcareous sand. The water is characteristically hard and has a pH in the range of 7.2 to 8.2 and the iron content ranges from .06 to .05 parts per million. The chloride content in water from the Castle Hayne is low, falling generally in the range of 10 to 40 parts per million.⁸

5.2 Land Suitability: Fragile Areas

Since the Town of Minnesott Beach is located in coastal North Carolina, it recognizes areas which are environmentally fragile and for which development is discouraged or subject to regulation. On the map of fragile areas (see map E) are shown areas which are considered to be fragile resources. The coastal marshes, estuarine waters, estuarine shoreline, and public trust areas are considered to be Areas of Environmental Concern (AECs) and are subject to permitting.

A. Coastal Wetlands

Costal wetlands are defined as any salt marsh or other marsh subject to regular or occasional flooding by tides, including wind tides (whether or not the tide waters reach the marshland areas through

⁸ Pamlico County Planning Dept., 1976.

natural or artificial water sources), provided this shall not include hurricane or tropical storm tides. Coastal marshes contain some, but not necessarily all of the following marsh plant species:

1. Cord Grass
2. Black Neelerush
3. Glasswort
4. Salt Grass
5. Sea Lavender
6. Bulrush
7. Saw Grass
8. Cat Tail
9. Salt Meadow Grass
10. Salt Reed Grass

In the Town, coastal wetlands occur at Alligator Gut entrance from the Neuse River for a distance of about 500 feet.

B. Estuarine Waters

Estuarine waters are "all the waters of the Atlantic Ocean within the boundary of North Carolina and all of the waters of the bays, sounds, rivers, and tributaries thereto seaward of the dividing line between coastal fishing waters and inland fishing waters, as set forth in an agreement adopted by the Wildlife Resources Commission and the Department of Natural Resources and Community Development filed with the Secretary of State, entitled "Boundary Lines, North Carolina Commercial Fishing--Inland Fishing Waters," revised to March 1, 1965.

In the Town, these waters are those of the Neuse River, and the entrance of the Alligator Gut for a distance of about 500 feet.

C. Public Trust Areas

Public Trust Areas are all waters of the Atlantic Ocean and the lands thereunder from the mean high water mark to the seaward limit of state jurisdiction; all natural bodies of water subject to measurable lunar tides and lands thereunder to the mean high water mark; all navigable natural bodies of water and lands thereunder to the mean high water level or mean water level as the case may be, except

privately owned lakes to which the public has no right of access; all water in artificially created bodies of water containing significant public fishing resources or other public resources which are accessible to the public by navigation from bodies of water in which the public has rights of navigation; and all waters in artificially created bodies of water in which the public has acquired rights by prescription, custom, usage, dedication, or any other means.

In the Town, these areas are the waters of Alligator Gut to about 500 feet of the Neuse River.

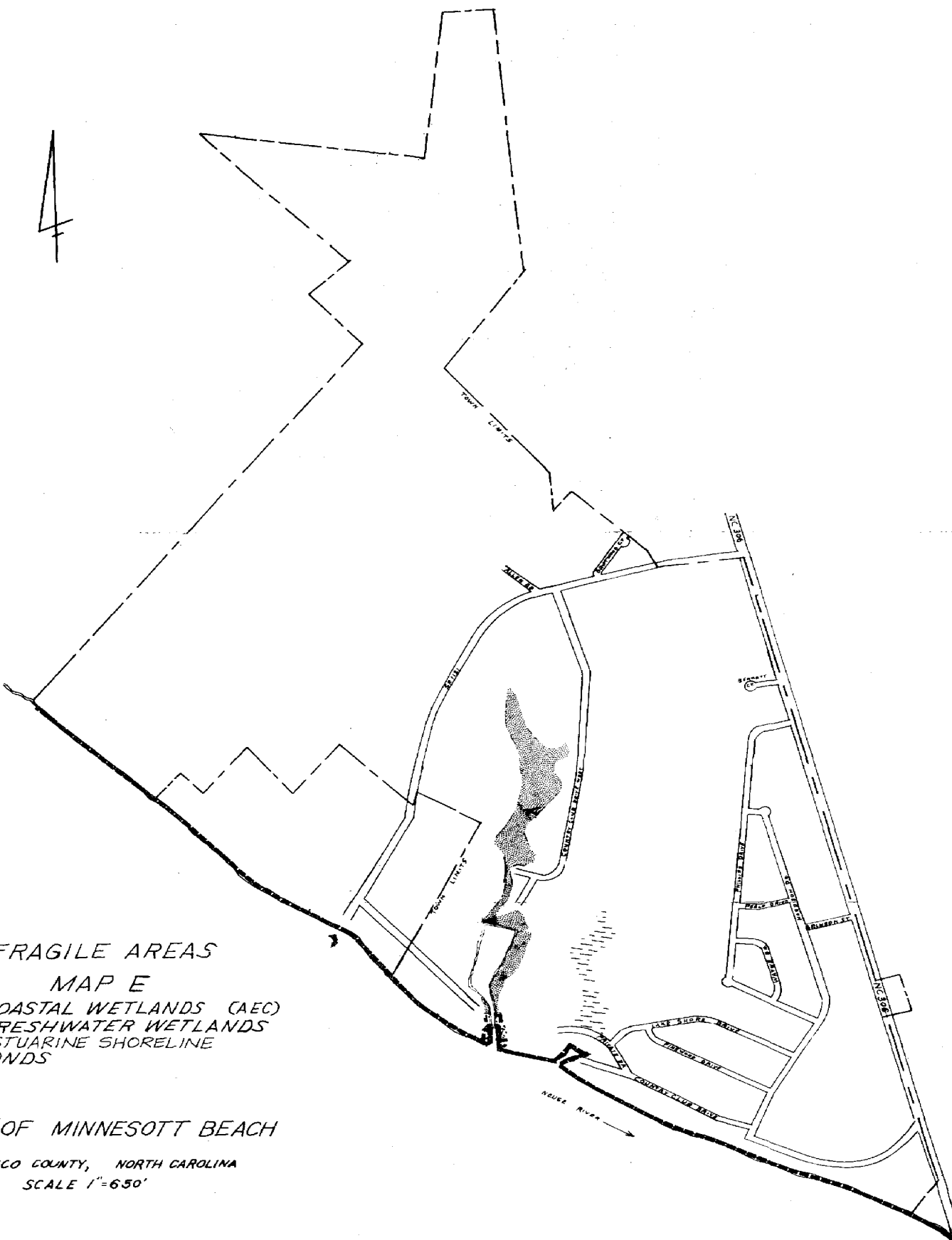
D. Estuarine Shoreline

Estuarine shorelines, although characterized as dry land, are considered a component of the estuarine system because of close association with the adjacent estuarine waters. They are those non-ocean shorelines which are especially vulnerable to erosion, flooding or other adverse effects of wind and water and are intimately connected to the estuary. This area extends from the mean high water level or normal water level along the estuaries, sounds, bays, and brackish waters as set forth in an agreement adopted by the Wildlife Resources Commission and the Department of Natural Resources and Community Development for a distance of 75 feet landward.

In the Town, this area is the shoreline of the Neuse River, and the entrance to Alligator Gut for a distance of about 500 feet.

Other fragile areas in the Town are the fresh water wetlands adjacent to the marina creek and the small lakes which are within the golf club property.

No historic or archaeologic sites are known to exist in the Town.



FRAGILE AREAS
MAP E

- WAVE COASTAL WETLANDS (AEC)
- STIPPLE FRESHWATER WETLANDS
- DASH ESTUARINE SHORELINE
- CIRCLE POND

TOWN OF MINNESOTT BEACH

PAMLICO COUNTY, NORTH CAROLINA
SCALE 1"=650'

5.3 Land Suitability: Areas With Resource Potential

There are no areas within the Town of Minnesott Beach which could be classified as prime resource areas. The Town presently does not exercise extraterritorial jurisdiction nor does it desire to.

Although the Town has no public park, the Neuse River offers considerable recreational potential for boating and fishing, and a fishing pier in the Town offers recreational fishing opportunities. The small beach area along the Neuse River is used by townspeople. The Minnesott Beach Golf and Country Club offers additional recreational opportunity. The free ferry is used by many as an opportunity to ride on the river. A large YMCA camp, Camp Seagull, is adjacent to the Town on its eastern border.

Near the fishing pier is a boat launch ramp for access to the Neuse, and a large marina facility is underway in the western part of Town.

6.1 Capacity of Community Facilities

A. Water System

The Town has recently completed construction of a public water system and all areas of the Town are served. The system includes a 75,000 gallon elevated storage tank, two wells each producing about 200 GPM and a water softener with a capacity of 150 GPM. These facilities are located on the corner of Brinson and Hardison Streets in the-Town.

At present, there are 120 water connections. Eighty-eight of these are permanent and 32 seasonal. Of these, ten are classified as commercial. The following is a table of water use per month in

the Town (does not include water wasted to maintain good water in the lines at all times).⁹

<u>Month</u>	<u>Water Use Per Month</u>
June 1980	1,087,900 gallons
May	849,427
April	481,150
March	378,887
February	413,702
January	353,370
December 1979	422,900
November	453,850
October	504,990
Spetember	622,390
August	926,280
July	877,470

Since the capacity of the system is about 200,000 GPD, the system is currently operating at about 7% capacity during the winter, and about 18% capacity during the summer.

B. Sewer

The Town does not have nor anticipate a public sewer system during the planning period. Soil management practices and low density have prevented any significant problems with on lot sewage disposal. Few of the soils in the Town are suitable for septic tank filter fields. Continued low density and attempts to locate development on suitable soils should prevent health and environmental problems resulting from septic tank problems.

C. Roads

The two main roads around Minnesott Beach are NC 306 which runs along the Town's eastern border to the Ferry Dock, and SR 1121 (Bennett St.) which runs north-south along the Town's western border. Bennett St.

⁹ Town of Minnesott Beach

is a dead-end at the marina site. No connection is provided over the Alligator Gut to the eastern side of Town. Another road which runs north-south and serves the western portion of Town is Country Club Drive West. This road also is a dead-end near the marina site. Few of the roads experience any capacity problems except for NC 306 which sometimes has traffic backed up while cars await the Ferry across the Neuse River. SR 1123, Country Club Drive serves as the river front access road. It is beset with a number of jogs and a "Y" where it intersects with SR 1130 which dead-ends at the Country Club. The major problem regarding the street system is the three dead streets which cause accessibility difficulties and potential safety problems.

D. Schools

Students from Minnesott Beach attend the Arapahoe Elementary School in Arapahoe (K-8) and the Bayboro High School. The elementary school has an enrollment of 262, the High School has 681 students. Depending upon the growth in the beach area, it is possible that the Arapahoe school will have to be replaced, or a new structure built in Arapahoe or Grantsboro. The elementary school is an old facility and is not expected to be serviceable after the next five years.

The High School will probably need some additions, but is in overall good condition. More physical education facilities are needed.

E. Fire and Police

The Town is served by the volunteer fire department at Arapahoe. The Town contributes financially to the operation of the department, but the fire department is mostly operated through donations and fund raising events.

The Town does not have a police department, but the County Sheriff's Department patrols the area, and the Sheriff lives in Town.

F. Hospital and Medical

The nearest hospital is in New Bern, about a half-hour drive. A private medical clinic is located centrally in Pamlico County. These facilities are considered to be adequate to meet the population growth throughout the planning period.

G. Solid Waste

The Town street maintenance equipment is used to haul solid waste from the Town to the County landfill at Reelsboro. The County landfill is at capacity and is expected to close in another year. Presently the County is doing soil testing to determine other possible suitable locations.¹⁰

¹⁰ Information on facilities provided by Pamlico County.

PART III

CAPACITY ANALYSIS

7.1 Population Projection

The Town had a population of about 50 persons in 1970. Since its incorporation, the Town has grown at the rate of 15% per year. Although such a rate could probably not be applied to the ten year planning period, the Town will probably not lose population as indicated in the 1976 Pamlico County Land Use Plan. The Town has built a new water system and a new Town hall. The construction of a large marina on Alligator Gut will be an attraction for tourists, summer residents, and year-round residents. For planning purposes, we estimate the 1990 average summer high population to be 1000 persons.

7.2 Future Land Use Needs

In projecting the future land use need, our projections consider the distribution of existing population, the current structure of the economy, the areas existing and future investments in sewer and water facilities, its transportation system, its community facilities (i.e. schools, medical facilities, public services), and the growth policies of the Town. Since these factors have shaped and attracted land development in the past, they will probably do so in the future. Our approach to develop land use projections has included these considerations and, at the same time, they give an estimation of what our future needs for land will be.

Finally, one word of caution. Projecting land use needs is a very inexact science. Such projections are presented to provide decision makers with more insight than certainty into what is most

likely to occur in the future. They should be used as guidelines, not constraints, and should be used as benchmarks in making land development decisions.

A. Land Available for Development

In order to determine land suitable for urbanized uses, we must examine the land already used for such purposes, as well as vacant land which is not constrained. For this analysis, we have removed the following land uses and constraints from the available vacant land for development:

Existing residential use, existing commercial use, existing institutional use, existing transportation, utilities and communication use, existing recreational use, coastal marsh, estuarine and public trust waters, estuarine shoreline seventy-five feet from mean high water, wetlands, steep slopes, and areas of flood hazard. Removal of these areas from the total land area of the Town leaves about 600 acres of unconstrained land for development.

B. Methodology for Land Use Projection

Land use standards were prepared for five urbanized land uses which include residential, commercial, industrial, institutional, and recreational uses. Except for residential uses, these standards were derived from land requirements based on standard land use analysis planning models and adjusted for a town the size of Minnesott Beach.

The residential category was treated differently from the other urban categories due to the difficulty of allocating land requirements by housing type or density. An average land area per unit population is used as a standard to calculate residential land requirements. This area was calculated using the 1980 population and existing residential

use. The average is then applied as a constant to the 1990 projections.

The land use requirements were determined using the following equation:

$$L_{90} = (P_{90} - P_{80}) (K_h + K_c + K_i + K_p + K_r)$$

where L_{90} = land required to accommodate the 1990 population

P_{90} = 1990 population

P_{80} = 1980 population

K_h = standard land requirement for residential use

K_c = standard land requirement for commercial use

K_i = standard land requirement for industrial use

K_p = standard land requirement for institutional use

K_r = standard land requirement for recreational use.

The following are standards applied to the land use needs projection:

Standard for Residential Land = .217 acres

Standard for Commercial Land = .005 acres

Standard for Industrial Land = .010 acres

Standard for Institutional Land = .001 acres

Standard for Recreational Land = .007 acres

C. Land Use Projections

$$L_{90} = 860 (.217 + .005 + .010 + .001 + .007)$$

L_{90} Residential = 186.62 acres

- L_{90} Commercial = 4.30 acres

L_{90} Industrial = 8.60 acres

L_{90} Institutional = 0.86 acres

L_{90} Recreational = 6.02 acres

Total 206.4 acres

The Town presently has 200 vacant plotted lots and a total of about 610 acres undeveloped. The Town should be unconstrained for some time to come. Probably the greatest limitation is land suitable for on-lot sewage disposal. The Town has about 200 acres of Contoe and Kenansville soils. Directing development to these soils would greatly reduce problems relating to on-lot sewage disposal.

7.3 Community Facilities Demands

The Town's water system has adequate capacity to meet needs throughout the planning period. Water supplies are plentiful.

The Town does not anticipate construction of a sewer system in the planning period. Although much of the area has severe restriction for use of on-lot sewage disposal, low densities and preparation of filter beds has prevented serious problems. The Town has 200 acres of soils suitable for on-lot sewage disposal.

The Town is in need of basic services such as more street maintenance persons and police. The joint fire department with Arapahoe is adequate, but the Town will need some equipment in the future.

It may be necessary at some point in the near future to connect Country Club Drive West with SR 1130 at the Country Club to allow traffic flow through the town and reduce safety problems.

Because the Town will probably continue to have a similar age, sex and economic profile throughout the planning period, no excessive demand is anticipated on County services such as schools or social services.

PART IV

POLICY FORMULATION

This section provides the rationale for and statement of Town policies. Where feasible, implementation plans are included. Policies are grouped according to land use categories of

- Resource Protection
- Resource Production and Management
- Economic and Community Development
- Continuing Public Participation

8.1 RESOURCE PROTECTION

A. AREAS OF ENVIRONMENTAL CONCERN

The term Area of Environmental Concern, or AEC, is used in North Carolina's Coastal Area Management Act (CAMA) to identify important natural resources, both on land and water, which could be damaged if subjected to incompatible development activity.

The Coastal Resources Commission (CRC) has identified thirteen different types of AECs -- in four general categories -- spelling out the significance and the basic management objectives for each, and has encouraged local governments to recommend those types of development, or use, which they consider appropriate in the AECs within their jurisdiction.

The AECs in Minnesott Beach fall into two general categories - those involving the Estuarine System and the Public Trust Waters.

The Estuarine System

1. Estuarine Waters

All of the AECs falling under the general classification of the estuarine system are to be found on or connected with the Neuse River. For Minnesott

Beach, the Neuse River makes up its entire southern border. Another area of estuarine significance is a small creek which enters the Neuse known as Alligator Gut. (See Part II, 5-2).

The Town recognizes the importance of the estuarine waters as the dominant component and bonding element of the entire estuarine system. The waters support the valuable commercial and sports fisheries of the coastal area which are comprised of estuarine dependent species. The Town recognizes its responsibility as a developed area along the Neuse River to prevent unnecessary further degradation of these estuarine waters.

The Town has been developed primarily as a recreation oriented subdivision community. No intensive development has been planned for nor desired by the majority of residents and landowners. The historical development of the Town has been primarily single-family homes on relatively large lots ($\frac{1}{2}$ acre on the average). Although concern about the quality of the Neuse is an important issue in the Town, it is generally believed that the style and low density development in the Town has not led to any furtherance of water quality degradation in the Neuse. Although it is recognized that many of the soils in the community are not favorable for on-lot sewage disposal, the soils are some of the highest in the County. Low densities appear to have averted significant problems arising from use of on-lot sewage disposal systems. Some policy alternatives considered have included, a) having no policy on estuarine waters; b) a simple statement of support of the CAMA program; c) requiring larger lot sizes throughout the community on un-subdivided land; d) requiring additional management controls for on-lot sewage disposal systems; e) looking at the feasibility of a public sewer system.

POLICY 1: THE TOWN RECOGNIZES THE IMPORTANCE OF HELPING TO PREVENT FURTHER SIGNIFICANT DETERIORATION OF THE WATER QUALITY OF THE NEUSE RIVER.

Implementation: The Town supports the CAMA permitting procedure which specifies compliance with use standards under 15 NCAC 7H, Section .0208. The Town is in the process of completing a zoning ordinance and subdivision regulations. The Town will draw the zoning boundaries in such a way as to allow for the denser uses to be provided for in areas where the soil properties are more suitable. Subdivision regulations will include standards to help prevent erosion and strict provisions for the placement and construction of on-lot sewage disposal facilities in areas near estuarine waters.

2. Estuarine Shoreline

Estuarine shoreline, although characterized by dry land, is considered a component of the estuarine system because of association with estuarine waters. In the Town, the estuarine shoreline is the shoreline of the Neuse River, as well as along Alligator Gut for a distance of about 500 ft. from the Neuse. Development within the estuarine shoreline influences the quality of estuarine life and is subject to the damaging processes of shorefront erosion and flooding.

The existing shoreline along the Neuse presently has a very narrow sand beach. The shoreline has eroded a total of 74.8 feet over the past thirty years. The use of more jetties along the Neuse has reduced erosion in some areas and has trapped sand which, with vegetation, has allowed accretion. Some individuals believe the continued man-made alterations will simply change the pattern of erosion, allowing some areas to slow erosion or accrete, while others suffer worse erosion rates. Alternatives

have been considered such as using Town funds to build bulkheads, establish rip-rap, or use other means to stop erosion. Some suggest no man-assisted attempts should be made. Land use for dwelling units does not appear to have caused significant erosion in Minnesott Beach.

POLICY 2. THE TOWN DESIRES TO ENSURE THAT SHORELINE DEVELOPMENT DOES NOT SIGNIFICANTLY HARM THE ESTUARINE SYSTEM. FURTHERMORE, ALTERATIONS TO THE SHORELINE IN TERMS OF EROSION-CONTROL STRUCTURES WILL NOT BE PERMITTED BY THE TOWN ON THE NEUSE RIVER, BUT WILL BE LEFT TO INDIVIDUAL LANDOWNERS IN OTHER AREAS.

Implementation: The Town supports the CAMA permitting procedure which specifies compliance with use standards under 15 NCAC 7H, Section .0209. The Town will incorporate in its zoning ordinance and subdivision regulations specific requirements for land uses which could cause shoreline erosion and include in the zoning ordinance regulations which would disallow the use of erosion control structures.

3. Coastal Wetlands

The unique productivity of the estuarine system is supported by decayed plant material and nutrients that are exported from the coastal marshlands. The value of marshlands in the animal food chain, as nesting areas, as nutrient and sediment traps, and as barriers against flood hazards has been well documented.

In Minnesott Beach, few areas of significant coastal marsh exist. What does exist is found for a distance of about 500 feet in the Alligator Gut (see Map E). These small marsh areas have limited productivity. The recent construction of a marina in the Alligator Gut further reduces the ecological significance of these marshes. Few alternatives are open

in terms of use or protection of coastal marsh areas for the Town. Present state and federal regulations would prohibit any intensive use of the areas. Types of uses the Town would support are discussed later in the section "Suitable Land Uses in the AECs."

POLICY 3: THE TOWN RECOGNIZES THE ENVIRONMENTAL VALUE OF COASTAL MARSHES AND DESIRES TO PROTECT THEM FROM SIGNIFICANT DAMAGE.

Implementation: The Town supports the CAMA permitting procedure which specifies compliance with use standards under 15 NCAC 7H, Section .0208. The Town considers these areas as conservation use lands and will designate them as such in the zoning ordinance. Specific standards in conformance with state and federal law will be incorporated in the zoning and subdivision regulations.

4. Public Trust Areas

The Public Trust Areas are all of the estuarine waters mentioned previously, as well as the waters of the Alligator Gut above the estuarine area. In these waters, the public has rights of navigation and recreation. Generally, it is federal and state policy to protect these areas from uses which would interfere with the public right of navigation in these waters, as well as uses which would significantly harm the biological and physical functions of these waters. Wetlands are often found in these areas which do not qualify as coastal marsh, yet have significant value as freshwater wetlands serving similar biological and physical functions.

In Minnesott Beach, the Public Trust Area waters of the Alligator Gut above the estuarine limit contain a marina development. The public's

right to navigation of this area has not been interfered with, and the U.S. Army Corps of Engineers has been careful to allow only appropriate development while protecting areas of freshwater wetland.

POLICY 4: THE TOWN WILL NOT RESTRICT THE PUBLIC'S
RIGHT TO NAVIGATION IN PUBLIC TRUST AREAS AND
WISHES TO PERPETUATE THEIR BIOLOGICAL VALUE.

Implementation: The Town supports the CAMA permitting procedure which specifies compliance with use standards under 15 NCAC 7H, Section .0208. The Town will include in its zoning ordinance and subdivision regulations specific standards regarding land uses adjacent to public trust areas.

B. Suitable Land Uses in the AECs

Generally, suitable land uses will be those uses which are consistent with the CAMA permitting procedure with highest priority being uses which foster conservation of the resources and second priority to uses which are water dependent. In the coastal wetlands and estuarine waters, the state would not permit nor the Town support development such as restaurants and businesses; residences; apartments; motels; hotels; trailer parks; parking lots and private roads and highways; and factories. The state may permit and the Town may support such uses as utility easements, fishing piers, docks, and agricultural uses such as farming and forestry drainage, as permitted under North Carolina's Dredge and Fill Act and/or other applicable laws. Any use permitted would have to comply with the state regulations and conditions imposed in the Town's zoning and subdivision regulations.

On the estuarine shoreline, the uses permitted are those which are permitted under the zoning ordinance for the zoning district. However,

the Town may permit bulkheading to prevent erosion, except on the Neuse River, and the building of piers, wharfs or marinas. CAMA use standards for these areas must be followed along with any specific regulations in the Town's zoning ordinance or subdivision regulations.

C. OTHER RESOURCES

The Town has not identified any unique or especially valuable natural areas within its borders. The Town is, however, concerned about the destruction of vegetated areas and habitats of various species indigenous to the area. One alternative considered to deal with vegetation and open space was a vegetation and open space ordinance. Another possibility was to establish a voluntary set of rules regarding vegetation protection. Some believe that this issue is not nor should be a consideration of Town government.

POLICY 5: IT IS THE POLICY OF THE TOWN TO ENCOURAGE THE RETENTION OF VEGETATION, PRESERVE OPEN SPACE, AND TO ALLOW THE NATURAL TERRAIN TO BE DISTURBED AS LITTLE AS POSSIBLE.

Implementation: The Town will include in its zoning ordinance and subdivision regulations standards regarding open space and vegetation when development occurs. A program of informing and educating citizens with regard to such resources will be developed.

D. HISTORIC AND ARCHAEOLOGIC SITES

No specific archaeological sites or historic sites are located in the Town. It is the policy of the Town, however, to encourage the identification and protection of historic and archaeological sites should any be found.

E. WATER

Three issues are involved in the assessment of water quality in the Town. The first issue is the availability and quality of water for the Town's water system. The second issue is the effect of individual septic systems on groundwater and surface water. The third issue is the potential for flooding.

1. Surface and Groundwater

The Town has recently completed a water system and all areas of the Town are served. The system has two wells available and the facilities are located within the Town at NC 306. The system is using water from the Castle Hayne aquifer, the aquifer of the Oligocene limestone of the Tertiary Period, Cenozoic Era.

With the present and projected densities in the Town, it is anticipated that contamination of the community water system from septic tanks is unlikely. Although an alternative for attempting protection of ground and surface water from future development would be larger lot sizes, the Town does not believe this to be necessary with existing relatively large lot sizes (average $\frac{1}{2}$ acre) and the consideration of soil capabilities for allowable zoning densities. Another alternative would be a public sewer system. However, such a system would not be feasible for some time to come, nor would it be necessary with planned policies.

The Town is primarily a recreation oriented residential community. The Town would not permit development of landfills or disposal of hazardous wastes.

POLICY 6: THE TOWN WILL NOT PERMIT DEVELOPMENT OR LAND USES WHICH
WILL DEGRADE THE QUALITY OF THE SURFACE WATERS, GROUND-
WATER, OR SIGNIFICANTLY LOWER THE WATER QUANTITY IN THE
AQUIFER.

Implementation: The Town will consider soil capabilities in the development of allowable zoning densities and the development of subdivisions. The Town will review all existing and proposed land uses to determine possible effects on surface and groundwater before giving necessary permits or approval.

2. Flooding

The Town is currently participating in the National Flood Insurance Program. Presently, there are 3 structures in a flood hazard zone since the Town is on very high ground in relation to the river. Average height of the river bank is 14.3 feet. At this time, the County enforces permits on flood hazard areas. When the Town appoints a zoning administrator, the Town will enforce its own flood hazard regulations.

3. Hurricane Evacuation

Although the Town, due to its location, may not experience problems due to hurricanes as severe as communities on the Ocean, hurricane evacuation is a concern. The Town has participated in emergency preparedness plans of the County and feels that current plans are sufficient to allow Town residents to be provided with adequate evacuation routing should the need arise.

8.2 RESOURCE PRODUCTION AND MANAGEMENT

A. LAND UTILIZATION

The Town's resources are embodied in its residential character as evidenced by its past growth and future desires of its property owners. The Town has no productive agricultural or forest areas, no known exploitable minerals or industrial potential. The Town has no commercial fisheries, although some residents continue to work at this trade. Aside from the community commitments to care for and manage its natural surroundings and man-made improvements, the Town's limited area precludes consideration of non-residential uses other than limited commercial and recreation. Recreational uses are those such as boating, golf, swimming, fishing, tennis, etc.

POLICY 7: THE TOWN IS PRIMARILY A RESIDENTIAL COMMUNITY AND THEREFORE DOES NOT DESIRE TO PROMOTE AGRICULTURE, FORESTRY, MINING, FISHERIES, INDUSTRY, ENERGY FACILITIES, OR TOURIST RELATED RECREATION.

8.3 ECONOMIC AND COMMUNITY DEVELOPMENT

A. ZONING

The Town has been working toward the development of a zoning ordinance and subdivision regulations in order to better control growth and development. Presently, a draft has been completed on these regulations. Because the Town is in the process of land use planning, the Town does not intend to adopt a zoning ordinance or subdivision regulations until growth and development policies have been adopted. At the same time, this process has the advantage of using the management tools to greatest advantage in the land use planning process.

4

R-20

R-M

R-15

C-M

R-20

C-2

R-M

C-1

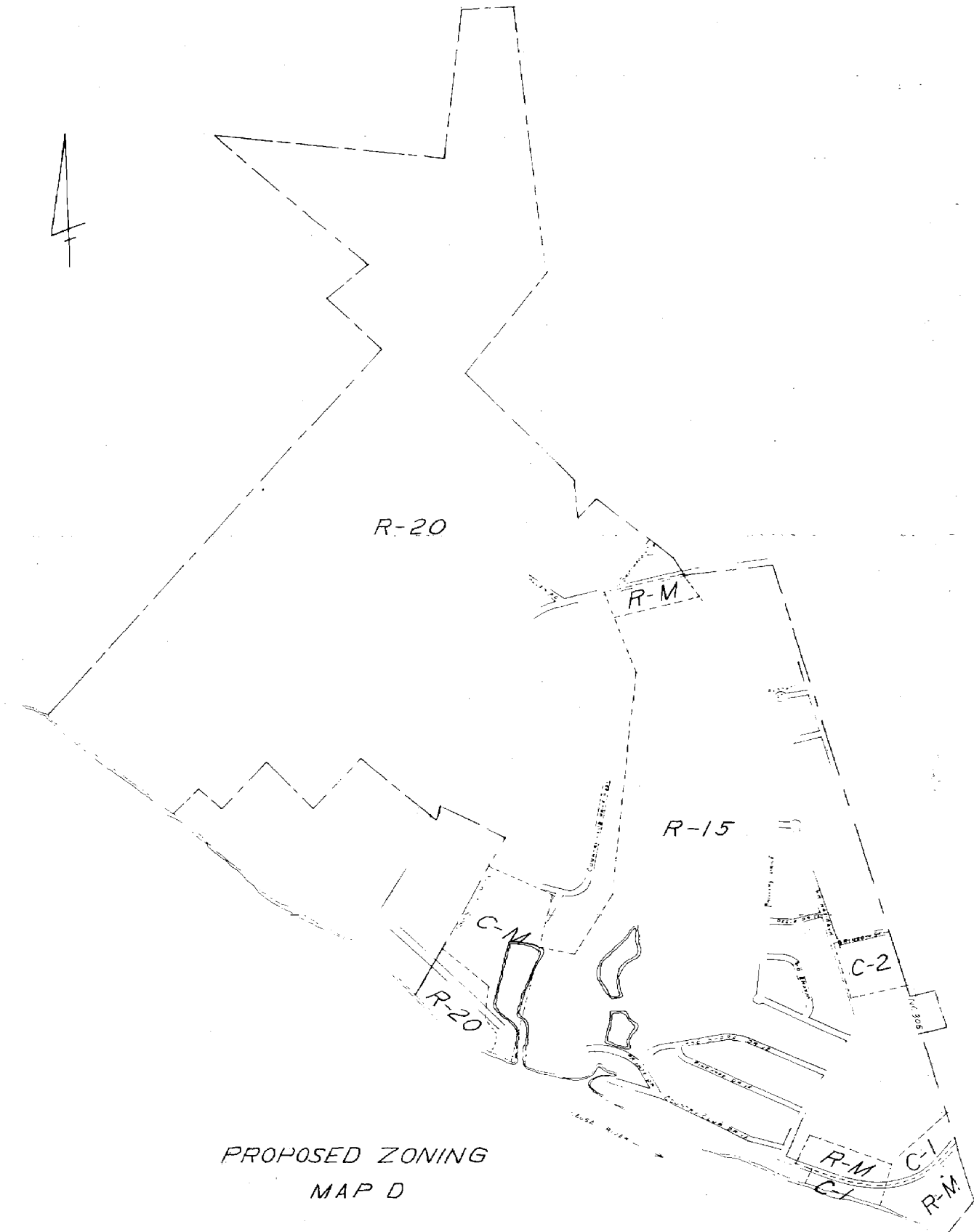
R-M

PROPOSED ZONING
MAP D

TOWN OF MINNESOTT BEACH

SCALE 1" = 650'

PANLICO COUNTY, NORTH CAROLINA



One of the more important zoning issues is the minimum lot sizes and locations of zoning boundaries. Although a great deal of the community has already been subdivided, recent annexations have provided considerable acres of land which, although not anticipated to be developed soon, may represent the future development area of the Town.

Because the Town is concerned with its environment and especially the water quality of the Neuse River, it has determined that any dense septic tank construction in many of the more unsuitable soils for septic tank use could prove to be detrimental to the water quality of the River. The Town does, however, have considerable areas of soils which are suitable for septic tank use. The Town therefore has considered designing the zoning map based upon the configuration of the soils and their capacity for development. Other alternatives considered were large generalized zoning areas based upon average historical development patterns, no zoning.

POLICY 8: THE TOWN WILL DEVELOP A ZONING ORDINANCE AND SUBDIVISION REGULATIONS BASED UPON THE CAPACITY OF THE AREA TO SUPPORT DEVELOPMENT AND WITH CONCERN FOR ENVIRONMENT.

Implementation: The Town is in the process of rewriting its initial draft on the zoning ordinance and subdivision regulations.

B. HOUSING MIX

The residential character of the Town is a major factor in attracting both resident and non-resident property owners. Although the residential character is mainly single-family, some multi-family town house type units exist. Also, a number of multi-family vacation use units are found on the Neuse. Another housing type found in the community is the mobile home.

Two large mobile home parks are located near the shoreline in the vicinity of the Neuse River ferry dock. Generally, the Town is in favor of single-family detached dwelling unit types. Well-built and managed town house multi-family units are also acceptable. Mobile homes have not proven to be tax advantageous to the community, and are considered by many to be aesthetically unpleasing.

POLICY 9: THE TOWN DESIRES TO MAINTAIN PRIMARILY SINGLE-FAMILY DETACHED RESIDENTIAL DEVELOPMENT AS WELL AS LIMITED AND WELL MAINTAINED MULTI-FAMILY TOWN HOUSE UNITS. THE TOWN DOES NOT DESIRE FURTHER MOBILE HOME USE.

Implementation: The Town will, through its new zoning ordinance and subdivision regulations regulate and limit densities and housing types within its zoning districts. The building code and subdivision regulations will insure proper building design and maintenance.

C. COMMERCIAL

Presently the community has limited commercial activity due to the small size of the Town and the seasonal nature of the population increase. A small motel and a restaurant, a small fishing pier and a boat launch facility; and a marina on the Alligator Gut are the extent of commercial activity.

Most residents of the Town would like to see some further commercial activity in the Town, especially essential services such as a gasoline station and a grocery store. The Town considered further restricting commercial activity.

POLICY 10: THE COMMERCIAL ZONE PROPOSED ON THE DRAFT ZONING MAP IS ACCEPTABLE AS CONSTITUTED AND WILL NOT BE INCREASED. USES PERMITTED IN THIS ZONE WILL BE ONLY THOSE WHICH ARE NECESSARY TO SUPPLY BASIC NEEDS OF THE TOWN RESIDENTS.

Implementation: The proposed zoning ordinance when adopted should implement this policy.

D. COMMUNITY SERVICES

The Town has recently completed a new Town Hall which serves to house Town administrative facilities. Fire protection is presently located 4 miles north in Arapahoe. Many feel that this distance is too far for adequate fire protection and fire insurance rates are high. Discussions are being held about placing a fire engine in Town, operated as a substation of the Arapahoe Fire District.

An issue of concern is police protection since the Town does not have its own police department. Police protection is only available through the County Sheriff's Department. Many residents have indicated a desire to have a Town policeman. As the Town grows, a Town policeman could become a necessity, especially during the summer months.

POLICY 11: THE TOWN WILL CONTINUE TO DEVELOP AND STUDY ALTERNATIVES TO THE CURRENT FIRE AND POLICE PROTECTION PROBLEM.

Implementation: The Town Board will cost out a one-man police department and determine funding alternatives to present to the community. The Town is studying the possibility of making an addition to the Town Hall to accommodate a fire engine.

E. WATER AND SEWER

The recently constructed water system in terms of water quantity and quality is sufficient to take care of the Town's needs through the planning

period (see p. 28).

The Town does not have or anticipate the need for a public sewer system during the planning period. Soil management practices and low density have prevented any significant problems with on-lot sewage disposal. A number of different zoning densities and boundaries have been analyzed in determining the proposed zoning map which is part of the new, proposed zoning ordinance.

POLICY 12: THE TOWN WILL DESIGN ITS ZONING MAP USING THE CAPABILITY OF THE SOILS TO ACCOMMODATE ON-LOT SEWAGE DISPOSAL TO LIMIT DENSITIES ON THOSE SOILS UNSUITABLE FOR ON-LOT SEWAGE DISPOSAL.

Implementation: In designing the final zoning map for adoption, the above policy will be implemented.

F. ROADS

Generally the road system and present maintenance procedures are adequate within the Town and are anticipated to continue to be so in the planning period. Two areas, however, continue to be of some concern. These are a) the western end of Country Club Drive where the road narrows, jogs, and an unofficial turnaround exists and b) the dead end at Country Club Drive West. Alternatives have been considered such as the straightening of the alignment of Country Club Drive and bringing the Country Club Drive West down to connect with Country Club Drive. Both alternatives have met with problems of both cost and the obtainment of a permit from DNRCD for fill in the case of Country Club Drive West.

POLICY 13: THE TOWN WILL CONTINUE TO STUDY THE ROAD PROBLEMS ASSOCIATED WITH COUNTRY CLUB DRIVE AND COUNTRY CLUB DRIVE WEST. THE TOWN

WILL CONTINUE TO ATTEMPT TO GAIN FURTHER CITIZEN SUPPORT TO ACTIVELY PURSUE IMPROVEMENTS AND SET ASIDE FUNDS FOR SUCH IMPROVEMENTS.

OFF ROAD VEHICLES ARE NOT CONSIDERED TO BE A PROBLEM AND NO POLICY IS NECESSARY AT THIS TIME.

Implementation: The Town will organize a citizen task group to analyze the problem in more detail and work with the community on implementable proposals.

G. REDEVELOPMENT

According to the questionnaire completed as part of the land use plan, many citizens feel that parts of the waterfront area of the Town are in need of repair or replacement. Many of the structures located on the waterfront were built many years ago and were constructed with a low-cost camp atmosphere concept. Now that the community has developed as a year-round residential community, these structures no longer fit the aesthetic residential pattern. What is needed is a separate study for the waterfront area to determine possible strategies and financing alternatives.

POLICY 14: THE TOWN WILL ATTEMPT TO SEEK GRANT OR LOAN FUNDS TO COMPLETE A STUDY ON THE WATERFRONT AREA TO DETERMINE ALTERNATIVES FOR ITS REDEVELOPMENT.

Implementation: The Town will continue to review state and federal programs and submit applications to such programs as may provide funding for a waterfront redevelopment study.

H. COMMITMENT TO STATE AND FEDERAL PROGRAMS

State and federal activities in the Town are limited to state road

maintenance, the Powell Bill grant for local roads, the CAMA program, Army Corps of Engineers jurisdiction over wetlands and navigation, and the state ferry.

POLICY 15: THE TOWN DOES NOT OPPOSE THE CONTINUED STATE MAINTENANCE OF ROADS, THE CAMA PROGRAM, THE ARMY CORPS OF ENGINEERS JURISDICTION OVER WETLANDS AND NAVIGATION, AND CONTINUED OPERATION AND MAINTENANCE OF PRESENT SYSTEM.

I. MAJOR FACILITIES

The Town has developed primarily as a residential community. Residents wish to keep the community free from large industrial or power generating facilities.

POLICY 16: THE TOWN DOES NOT DESIRE THE LOCATION OF MAJOR FACILITIES IN OR NEAR THE COMMUNITY.

J. TOURISM AND WATERFRONT ACCESS

Although the Town has developed with a resort atmosphere due to the location on the Neuse River and the location of a golf course in the center of Town, most residents consider the Town to be residentially oriented. Tourism is not considered to be an income producing industry in the Town.

Many Town residents would like to have access to the waterfront without the need to trespass on private property. The beach area is very small, and at most times of the year persons walking on the beach area would be on private property.

Many residents are concerned that any public acquisition of waterfront access would present maintenance and monitoring problems, especially considering the small

Town budget and lack of police. Also, however, many residents desire an alternative such as the Town acquiring some waterfront property so that more residents and visitors could enjoy the waterfront.

POLICY 17: THE TOWN WILL SEEK TO ACQUIRE WATERFRONT PROPERTY

Implementation: The Town will set up a citizen task group to find potential areas and investigate funding as part of the waterfront redevelopment project. The subdivision regulations when adopted will include specific requirements to provide money to be placed in a development improvement fund to be used for waterfront access.

8.4 PUBLIC PARTICIPATION

The Town of Minnesott Beach has always enjoyed active public participation of its residents in public affairs. Incorporation has not seen a lessening of this attitude. Town meetings, public hearings, etc., are well-attended.

The small size of such a community as Minnesott Beach lends itself to more opportunity of citizen communication regarding Town activities. Since many retired individuals live in Town, such individuals have been able to spend a great deal of time participating in Town business. A local newspaper is available which covers pertinent Town government activities.

As part of the Land Use Plan, citizens were advised of Plan work sessions by the newspaper. In order to determine the thoughts of non-resident landowners, as well as residents, a land use planning questionnaire was mailed to all landowners of Minnesott Beach. Response was extremely high (over 90% of the questionnaires were returned with responses). The analysis of the questionnaire is found in section 2.2 B. The results of the questionnaire were used by the Planning Board in the determination of policies.

POLICY 18: THE MINNESOTT BEACH LAND USE PLAN WILL BE REVIEWED AND UPDATED ANNUALLY. THE PUBLIC WILL BE OFFERED AN OPPORTUNITY TO PARTICIPATE IN ALL PHASES OF THE UPDATE PROCESS.

The Minnesott Beach Planning Board will review the Land Use Plan annually and recommend changes, if needed, to the Town Council in October of each year.

PART V

LAND CLASSIFICATION

The land classification system has been developed as a means of assistance in the implementation of the Plan. By delineation of land classes (see Map B), the Town has indicated where growth is expected to occur and where they want to insure conservation of resources.

Although specific areas are outlined on the land classification map, land classification is merely a tool to help implement policies. The Town of Minnesott Beach has determined that two classes of classification exist in the Town, community and conservation.

9.1 Community

The purpose of the community class is to provide for clustered land development to help meet housing, shopping, employment, and public service needs. Although the Town has a community water system, the low density residential character of the Town, which will be promoted by the policies expressed in the Land Use Plan, should allow the community to develop in such a manner as to preclude the necessity of a public sewer system. The proposed zoning ordinance will provide for limited commercial areas to allow for basic service needs for Town residents. The densities regulated by the zoning map will be based upon suitability of soils for on-lot sewage disposal. A review of the policies in the Land Use Plan will show that the concept of limited growth residential community development in suitable areas and appropriate densities is the basic goal to be implemented in the area shown as community on the classification map.

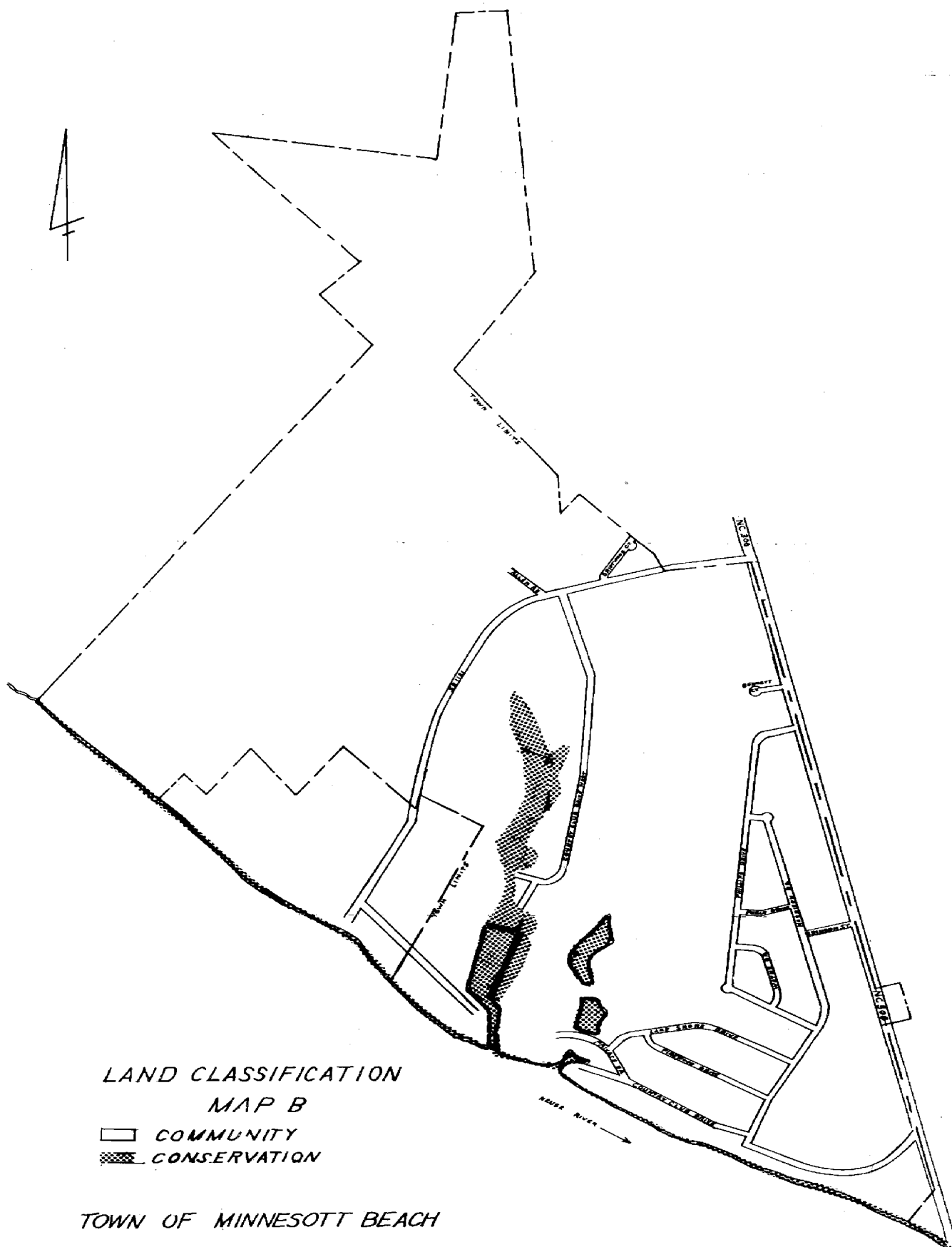
9.2 Conservation

The purpose of the conservation class is to provide for effective long-

term management of significant limited or irreplaceable areas. This management may be needed because of its natural, cultural, recreational, productive, or scenic values. In the Town, these areas are shown on Map b as AEC areas and the Golf Course.

For protection of AEC areas in Minnesott Beach (estuarine waters, estuarine shoreline, marshes, public trust areas, and some freshwater wetlands) the Town relies on three approaches. One, the CAMA permitting procedure, through which attempts to encroach on AEC areas are regulated; two, federal permitting procedures through the Army Corps of Engineers regulating freshwater wetland areas and obstructions to navigation; and, three, Town development strategies and regulations (see Part II, 5.2 and Part IV). It is the policy of the Town to protect surface and groundwater by implementing zoning boundaries and densities which are tied to the suitability of the soils for on-lot sewage disposal. The Town will disallow bulkheading on the Neuse River to prevent scalloping of the beach by intermittent structures. Bulkheading of inland streams and creeks will be permitted to prevent erosion and sedimentation.

The Golf Course will be protected from development by a series of use standards which will permit some development of its fringes while maintaining the open space should the present owners abandon the recreational use.



LAND CLASSIFICATION
MAP B

□ COMMUNITY
▨ CONSERVATION

TOWN OF MINNESOTT BEACH

PAMLICO COUNTY, NORTH CAROLINA
SCALE 1"=650'

